

### **AMENDMENTS TO THE CLAIMS**

Applicant has submitted a new complete claim set indicating marked up claims with insertions and deletions indicated by underlining and strikeouts, respectively.

1. (Currently amended) A method for obtaining a substantially pure population of hematopoietic stem cells, comprising:
  - (a) contacting a biological sample comprising [[a]] hematopoietic stem cells with an affinity agent which binds to endothelial protein C receptor (EPCR) under conditions appropriate for binding to occur; and
  - (b) separating cells that bind to the affinity agent from cells that do not bind to the affinity agent, thereby producing a substantially pure population of hematopoietic stem cells.
2. (Previously presented) The method of claim 1, wherein the affinity agent is an antibody or fragment thereof.
3. (Previously presented) The method of claim 1 or 2, wherein the step of separating cells is performed by a method selected from the group consisting of: column chromatography, fluorescence-activated cell sorting, magnetic bead separation and direct immune adherence.
4. (Previously presented) The method of claim 1, wherein the biological sample comprising cells is selected from the group consisting of: bone marrow cells, embryonic yolk sac, fetal liver, fetal and adult spleen and blood.
5. (Canceled)
6. (Currently amended) A method for obtaining a substantially pure population of EPCR+ hematopoietic stem cells, comprising:
  - (a) contacting a biological sample comprising EPCR+ hematopoietic stem cells with an affinity agent which binds to the endothelial protein C receptor (EPCR) under conditions appropriate for binding to occur; and

(b) separating cells that bind to the affinity agent from cells that do not bind to the affinity agent, thereby producing substantially pure population of EPCR+ hematopoietic stem cells.

7. (Previously presented) The method of claim 6, wherein the affinity agent is an antibody or fragment thereof.

8. (Previously presented) The method of claim 6 or 7, wherein the step of separating cells is performed by a method selected from the group consisting of: column chromatography, fluorescence-activated cell sorting, magnetic bead separation and direct immune adherence.

9. (Previously presented) The method of claim 6, wherein the biological sample comprising cells is selected from the group consisting of: bone marrow cells, embryonic yolk sac, fetal liver, fetal and adult spleen and blood.

10. (Previously presented) The method of claim 9, wherein the EPCR+ cells are human EPCR+ cells.

11. (Previously presented) The method of claim 9, wherein the EPCR+ cells are murine EPCR+ cells.

12-13. (Canceled)